JRM:lmp 8/24/04

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Davis et al.

Application No.: 09/482,786

Filed: January 13, 2000

For: ASSOCIATING DATA WITH IMAGES IN
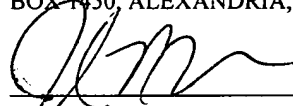   IMAGING SYSTEMS

Examiner: B. Choobin

Date: August 24, 2004

Art Unit: 2625

Conf. No.: 7463

#17 appeal Brief mail 9/5/04

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on August 24, 2004, as First Class Mail in an envelope addressed to: MAIL STOP APPEAL BRIEF-PATENTS COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450.

Joel R. Meyer
Attorney for Applicant

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APPEAL BRIEF

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I **REAL PARTY IN INTEREST**

The real party in interest is Digimarc Corporation, by an assignment from the inventors recorded at Reel 010896, Frames 0362-0364, on June 12, 2000.

II **RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

III. **STATUS OF CLAIMS**

Claims 15-23 and 34-37 stand finally rejected and appealed. Claims 24-25 are allowed. Claims 1-14 and 26-33 are withdrawn from consideration.

IV. **STATUS OF AMENDMENTS**

No amendments have been filed subsequent to the final rejection.

V. **SUMMARY OF THE INVENTION**

As set forth in claim 15, one aspect of the invention is a method for associating auxiliary data with an image. The method extracts a steganographic reference to auxiliary data in the image. It queries a metadata database to request the auxiliary data associated with the image using the extracted reference to access the auxiliary data in the metadata database, and receives the auxiliary data from the database.

Systems that exploit this method encode a steganographic reference into an image that acts as a persistent link between that image and auxiliary data about that image. By placing a steganographic reference to the auxiliary data in the image data itself, these systems enable software and devices to access the auxiliary data for an image wherever that image travels on a network. See, for example, page 17, line 27 to page 19, line 9, and accompanying Fig. 3.

The term, "steganographic," refers to a technique for encoding additional data in another signal such that the additional data is hidden in the signal. One example of steganographic encoding of additional data in an image is embedding an imperceptible digital watermark in that

image. See page 3, lines 8-15. See also, page 13, lines 17-28. The term, "metadata," refers to data associated with a digital object, such as an image. See page 3, lines 20-21. A list of examples of metadata for images starts on page 16.

As set forth in claim 20, another aspect of the invention is an alternative method for associating auxiliary data with an image. This method maintains a database of auxiliary data items associated with images. Each item is associated with an image via a reference steganographically encoded in the image. From a requesting application, a request is received for auxiliary data associated with an image. This request includes a reference extracted from the image. The reference is used to locate the auxiliary data associated with the image in the database. The method returns the auxiliary data corresponding to the reference to the requesting application. See, for example, page 17, line 27 to page 19, line 9, and accompanying Fig. 3.

As set forth in claim 34, another aspect of the invention is an image database accessible on the internet that permits storage of images from plural unrelated consumers. The database maintains – for each of several images – a history file detailing the vendors from whom a consumer has requested service relating to an image. See, for example, page 24, lines 5-28.

As set forth in claim 35, another aspect of the invention is a method of maintaining a transaction history for image processing transactions on images. This method maintains a transaction history of an image stored on a networked device. In response to receiving a transaction request to process an image stored on the networked device, the transaction history of the image is updated by adding data about the transaction to the transaction history. See, for example, page 24, lines 5-28.

VI.   ISSUES

- Did the Office err in rejecting claims 15-23 and 34-37 under 35 U.S.C. Section 102(e) as being anticipated by U.S. Patent No. 5,493,677 to Balogh et al. ("Balogh")?

VII.   **GROUPING OF CLAIMS**

Claims 15 and 19 are grouped together and stand or fall together.

Claims 20 and 23 are grouped together and stand or fall together.

Claims 16-18, 21-22, and 34-37 are independently patentable.

VIII.   **ARGUMENT**

The claims are patentable over the cited art for the reasons set forth below.

Claim 15

Claim 15 reads as follows:

15.   A method for associating auxiliary data with an image, the method comprising:

extracting a steganographic reference to auxiliary data in the image;

querying a metadata database to request the auxiliary data associated with the image

using the extracted reference to access the auxiliary data in the metadata database; and

receiving the auxiliary data from the database.

Balogh fails to disclose or teach: "extracting a steganographic reference to auxiliary data in the image." The watermark referred to in Balogh alters the blue channel of an image in a manner that allows the image to be viewed without obstruction on a computer monitor, but prevents a high-quality printout of the image. This watermark does not carry a reference to auxiliary data. See col. 10, line 50 to col. 11, line 52. Balogh cannot possibly teach, "extracting a steganographic reference to auxiliary data in the image," because Balogh does not teach a steganographic reference to auxiliary data in an image. Even if one assumes that Balogh's watermark is "steganographic," there is no reference to auxiliary data in Balogh's watermark. Therefore, Balogh cannot teach "extracting a steganographic reference" as claimed.

The Office has cited col. 8, line 64 to col. 9, line 14 as allegedly teaching this aspect of claim 15. This passage states: "Image 250 and metadata 262 are applied to uploading, archiving, watermarking and indexing service 302 for initial processing. Service 302 transfers full-

resolution images, e.g., 250 for long-term storage onto a conventional medium such as magnetic tape; generates browse-resolution images, watermarks such images and stores them for browsing service 308; stores metadata and any additions to the semantic net resulting from disambiguation for index querying service 306, and stores licensing and pricing information for use by purchase and delivery service 310 to permit on-line delivery of a full-resolution image 350." While this passage refers to both metadata and watermarking, there is no extracting of a steganographic reference as claimed. In Balogh, there is no relationship between the watermark and the metadata. Therefore, the watermark does not act as "a steganographic reference to auxiliary data" as claimed.

The Office contends that Applicant is attempting to distinguish claim 15 from Balogh on features that are not recited in this claim, such as "carrying a reference to auxiliary data." To clarify, Applicant is merely showing that in order for Balogh to teach "extracting a steganographic reference to auxiliary data in an image," Balogh must teach "a steganographic reference to auxiliary data in an image" as claimed. Balogh does not teach this aspect of the claim, and therefore, it does not anticipate claim 15.

Claim 16

Claim 16 reads as follows:

16. The method of claim 15 including:

using the auxiliary data received from the database to create an image file including the image and the auxiliary data.

Balogh fails to teach "using the auxiliary data received from the database to create an image file including the image and the auxiliary data" in combination with the other claim elements. The cited passage at column 4, lines 15-33, refers to metadata and images, but does not teach how to use auxiliary data received from a database to create an image file including the image and auxiliary data as claimed. Therefore, the Office has failed to carry its burden of showing how Balogh teaches all of the elements of claim 16.

Claim 17

Claim 17 reads as follows:

17. The method of claim 15 including:

sending authentication data to the metadata database to request access to the auxiliary data associated with the image.

The Office contends that Balogh teaches elements of claim 17 at col. 9, lines 15-34. The cited passage at col. 9, lines 15-34 refers to a credentials verification service 304 that is used to control whether users can search for and purchase images. This service is not used to "request access to the auxiliary data associated with the image" as claimed. The Office has failed to carry its burden of showing how Balogh teaches all of the elements of claim 17.

Claim 18

Claim 18 reads as follows:

18. The method of claim 15 including:

sending a request to the metadata database to edit the auxiliary data associated with the image.

The Office contends that Balogh teaches elements of claim 18 at col. 10, lines 50-65. The cited passage at col. 10, lines 50-65 refers to a process of overlaying a digital representation of an image with a digital watermark. This passage fails to teach "sending a request to the metadata database to edit the auxiliary data associated with the image" as claimed. The Office has failed to carry its burden of showing how Balogh teaches all of the elements of claim 18.

Claim 19

Claim 19 reads as follows:

19. A computer readable medium having software for performing the method of claim 15.

Claim 19 is patentable over Balogh for the same reasons as claim 15 and therefore, stands or falls with claim 15.

Claim 20

Claim 20 reads as follows:

20.   A method for associating auxiliary data with an image, the method comprising:

maintaining a database of auxiliary data items associated with images, each item being associated with an image via a reference steganographically encoded in the image;

from a requesting application, receiving a request for auxiliary data associated with an image, the request including a reference extracted from the image;

using the reference to locate the auxiliary data associated with the image in the database; and

returning the auxiliary data corresponding to the reference to the requesting application.

Balogh fails to disclose or teach: "each item being associated with an image via a reference steganographically encoded in the image" as set forth in claim 20. The Office contends that Balogh teaches this aspect of claim 20. In particular, the Office quotes Balogh as follows: "images are retrieved by association metadata with an image". The Office provides no citation for this quote and a text search of the Balogh reference does not reveal this language in the reference. Balogh does not teach a database where an item in the database is associated with an image via a reference steganographically encoded in the image as claimed. As stated previously, Balogh's watermark does not act as a reference steganographically encoded in the image because Balogh's watermark lacks the capability to act as a reference. Since Balogh fails to teach all of the elements of claim 20, it fails to anticipate this claim.

Claim 21

Claim 21 reads as follows:

21.   The method of claim 20 including:

determining whether the requesting application has access rights to the requested auxiliary data.

The Office cites column 17, lines 38-45 as allegedly disclosing the elements of claim 21. This passage refers to how Balogh's system allows a user to purchase rights to and obtain

delivery of images. The Office has not established that Balogh teaches: "determining whether the requesting application has access rights to the requested auxiliary data" as claimed. The cited passage in Balogh does refer to access rights to auxiliary data associated with an image, apart from access rights to the image itself. The Office has failed to carry its burden of showing how Balogh teaches all of the elements of claim 21.

Claim 22

Claim 22 reads as follows:

22. The method of claim 20 including:

determining whether the requesting application has editing rights for the requested auxiliary data.

The Office cites column 16, lines 40-62 as allegedly disclosing the elements of claim 22. This passage describes aspects of a user interface that displays search results for image searches in Balogh's system. This passage does not relate to "determining whether the requesting application has editing rights for the requested auxiliary data" as claimed. The Office has not established that Balogh teaches the elements of claim 22.

Claim 23

Claim 23 reads as follows:

23. A computer readable medium having software for performing the method of claim 20.

Claim 23 is patentable over Balogh for the same reasons as claim 15, and therefore, stands or falls with claim 15.

Claim 34

Claim 34 reads as follows:

34. An image database accessible on the internet, permitting storage of images from plural unrelated consumers, characterized in that the database maintains – for each of several images – a history file detailing vendors from whom a consumer has requested service relating to an image.

Balogh fails to teach the claimed history file detailing vendors from whom a consumer has requested service relating to an image as claimed. The Office has cited col. 1, lines 48-52 as allegedly disclosing this element. This passage indicates that pricing information may be stored for an image, but does not refer to anything that resembles the claimed history file.

Claim 35

Claim 35 reads as follows:

35. A method of maintaining a transaction history for image processing transactions on images, the method comprising:

maintaining a transaction history of an image stored on a networked device;

in response to receiving a transaction request to process an image stored on the networked device, updating the transaction history of the image by adding data about the transaction to the transaction history.

Balogh fails to disclose or teach the claimed transaction history. The cited passage at col. 4 lines 35-47 refers to an electronic system enabling users to order images and processing ordering transactions. However, there is no discussion of a transaction history as claimed.

Claim 36

Claim 36 reads as follows:

36. The method of claim 35 including:

associating the transaction history with the image through a link between the image and the transaction history.

The Office has failed to establish how Balogh teaches: "associating the transaction history with the image through a link between the image and the transaction history" as claimed. Therefore, the Office has failed to carry its burden of showing how Balogh anticipates claim 36.

Claim 37

Claim 37 reads as follows:

37. The method of claim 36 wherein the link is a steganographic link embedded in the image.

The Office has failed to establish how Balogh teaches: "wherein the link is a steganographic link embedded in the image" as claimed. Therefore, the Office has failed to carry its burden of showing how Balogh anticipates claim 37.

IX.   CONCLUSION

For the foregoing reasons, the final rejection of the claims should be reversed.
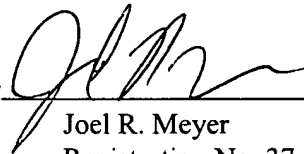

Date: August 24, 2004

Respectfully submitted,

CUSTOMER NUMBER 23735

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By_____
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APPENDIX
Pending Claims Involved in the Appeal

15. A method for associating auxiliary data with an image, the method comprising:

extracting a steganographic reference to auxiliary data in the image;

querying a metadata database to request the auxiliary data associated with the image using the extracted reference to access the auxiliary data in the metadata database; and

receiving the auxiliary data from the database.

16. The method of claim 15 including:

using the auxiliary data received from the database to create an image file including the image and the auxiliary data.

17. The method of claim 15 including:

sending authentication data to the metadata database to request access to the auxiliary data associated with the image.

18. The method of claim 15 including:

sending a request to the metadata database to edit the auxiliary data associated with the image.

19. A computer readable medium having software for performing the method of claim 15.

20. A method for associating auxiliary data with an image, the method comprising:

maintaining a database of auxiliary data items associated with images, each item being associated with an image via a reference steganographically encoded in the image;

from a requesting application, receiving a request for auxiliary data associated with an image, the request including a reference extracted from the image;

using the reference to locate the auxiliary data associated with the image in the database; and

returning the auxiliary data corresponding to the reference to the requesting application.

21. The method of claim 20 including:

determining whether the requesting application has access rights to the requested auxiliary data.

22. The method of claim 20 including:

determining whether the requesting application has editing rights for the requested auxiliary data.

23. A computer readable medium having software for performing the method of claim 20.

34. An image database accessible on the internet, permitting storage of images from plural unrelated consumers, characterized in that the database maintains – for each of several images – a history file detailing vendors from whom a consumer has requested service relating to an image.

35. A method of maintaining a transaction history for image processing transactions on images, the method comprising:

maintaining a transaction history of an image stored on a networked device;

in response to receiving a transaction request to process an image stored on the networked device, updating the transaction history of the image by adding data about the transaction to the transaction history.

36. The method of claim 35 including:

associating the transaction history with the image through a link between the image and the transaction history.

37. The method of claim 36 wherein the link is a steganographic link embedded in the image.